

We claim:

1. A aliquot vessel array for containing a plurality of liquid patient samples in test wells, said array comprising:

5 a base plate having an upper surface and a lower surface with a pair of mutually parallel side walls extending upwardly from the upper surface;

a pair of parallel rails depending downwardly from the base plate, each parallel rail having a foot section at its lower extremity; and,

10 an array of open test wells formed on the base plate extending upwardly therefrom and confined between the pair of parallel side walls,

wherein the parallel side walls are attached to the array of open wells by a number of notched side flanges having a notch adapted to mate with the foot section of a rail.

15 2. The array of claim 1 wherein the base plate is defined by mutually parallel longer edges perpendicular to mutually parallel shorter edges, the mutually parallel side walls extending lengthwise along the longer edges and being positioned inside the outer boundary of the base plate, the side walls having a length shorter than the longer edges so that a longer perimeter portion remains along the outermost portions of base plate along the longer edges and a shorter perimeter portion remains 20 along the outermost portions of base plate along the shorter edges.

3. The array of claim 2 wherein a zero-backlash hitch is formed in a shorter perimeter portion of the base plate.

25 4. The array of claim 2 wherein a securing bulge is formed in a longer perimeter portion of the base plate.

5. The array of claim 2 wherein a securing finger is formed in a longer perimeter portion of the base plate.

30 6. The array of claim 2 wherein a number of transfer hubs are formed in each of the longer perimeter portions of the base plate between a side wall and a longer edge, the transfer hubs having a cylindrical shape axially aligned with the plane of the base plate so that approximately equal portions of the transfer hubs extend above the upper and lower surfaces of the base plate.

7. The array of claim 1 wherein each of the test wells has a cylindrical shape depending downwardly from an open top and is closed at the lowermost end by conical shaped walls leading to a flat circular bottom so as to minimize liquid remaining in wells during a sample aspiration process.

5 8. The array of claim 3 wherein the zero-backlash hitch comprises an opening in the base plate and a pair of semi-circular sleeves extending downwardly therefrom, one sleeve formed to slant backwards from the front of the array towards the other sleeve formed generally perpendicularly to the base plate, the pair of semi-circular sleeves being spaced apart a predetermined distance.

10 9. The array of claim 4 wherein the securing bulge protrudes slightly outwards from the longer edge of the base plate and an elongate opening is formed within the longer perimeter portion between the side wall and the longer edge of the base plate.

15 10. The array of claim 5 wherein the securing finger protrudes slightly outwards from the longer edge of the base plate and is separated from the longer perimeter portion by a notch formed within longer perimeter portion between side wall and longer edge.

20 11. The array of claim 1 further comprising a recessed portion formed in a side wall to frame an identifying indicia.

12. The array of claim 1 wherein the notched side flanges comprise an inclined guide leading to the notch so that the parallel rail of another aliquot vessel array slides over the inclined guide and snap the foot sections of the rails snap into the notches, thereby to secure the pair of aliquot vessel arrays together.

25 13. A multiple number of the aliquot vessel arrays of claim 1 stacked atop one another by mating the notched side flanges of one aliquot vessel array with the foot sections of parallel rails of a next adjacent aliquot vessel array.

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